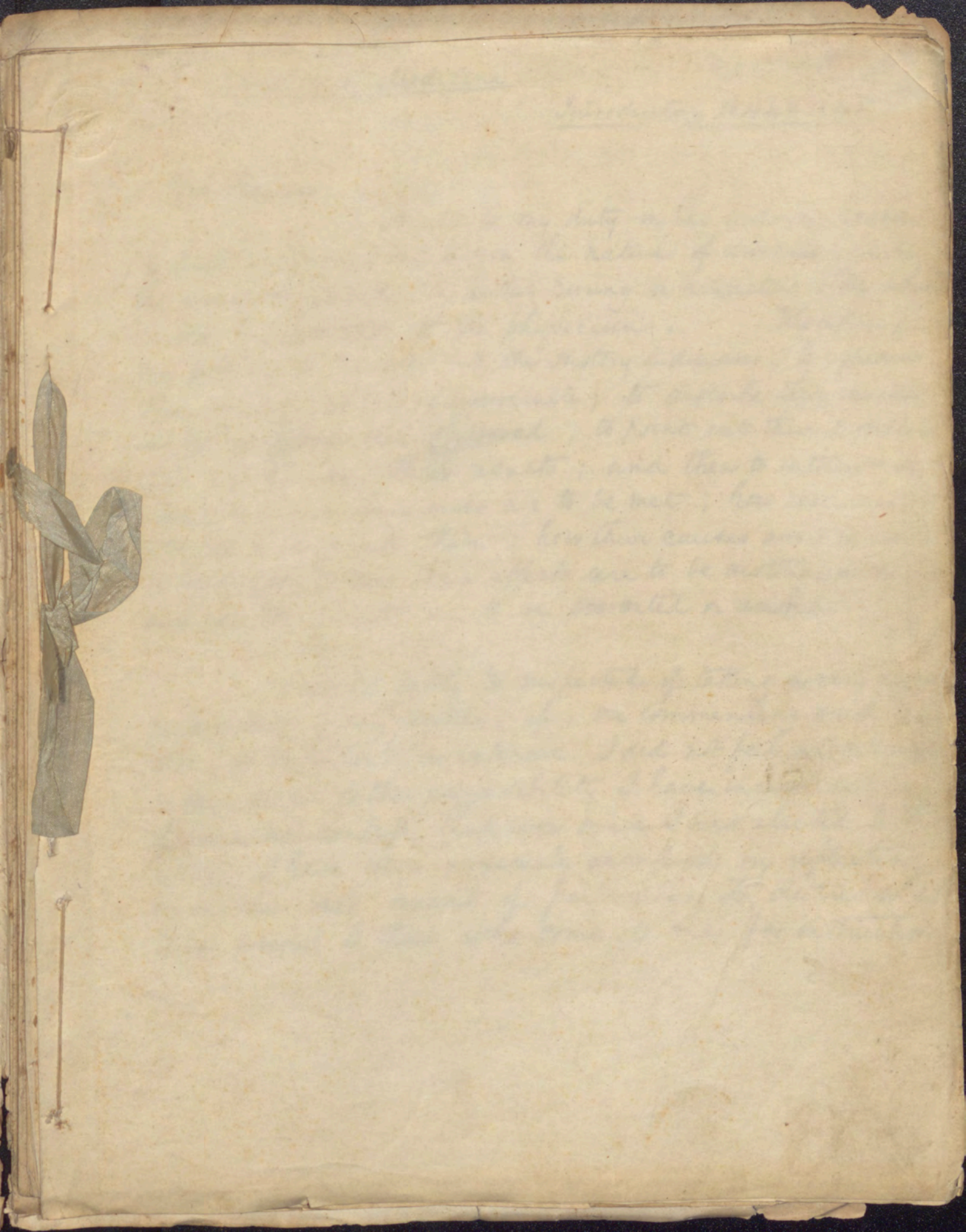

Monkeur

History of Medicine.

Introductory 1844 & 1845.

Gentlemen

It will be my duty in the ensuing course of lectures, to point out to you the nature of diseases, and the means employed, in either curing or alleviating those which custom has allotted to the physician. Therefore, my province is, to enter into the History of diseases; to explain their causes, as far as discoverable; to describe their varieties, as fas as have been observed; to point out their symptoms, their tendencies, their results; and then to instruct in what manner these evils are to be met; how resources are to be used against them; how their causes are to be averted or distroyed; how their effects are to be distinguished; and how their results are to be prevented or removed.

I should justly be suspected of taking a very imperfect view of my duties, if, on commencing such a task, so important, so extensive, I did not feel and acknowledge a deep sense of the responsibility I have incurred; — if I did not confess, that ever since I was elected to this office, I have been anxiously occupied in reflecting upon the best means of performing its duties so as to be useful to those who come to me for instruction.

I may be permitted, also, to observe, that the zeal which animates so large a portion of the members of the profession, was never so obvious as at the present — the multiplication of schools of medical instruction — the establishment of lectures upon the different subjects of science and medicine — the entire approbation of the public as to anatomical pursuits — the establishment of theatres and schools by individual capital, in our principal cities must prove beneficial both to the profession and to the public; they all show, that he who now becomes a public teacher, in any branch of science, must expect powerful and able competition.

Far, indeed, from regretting such competition, so long as it is fair and honourable we wish every teacher, to every institution, the full share of approbation and reward due to their respective merits, and to the usefulness of the knowledge communicated to those whom they instruct, in behalf of suffering humanity.

Let the sincere desire to enable every student to perform the arduous, anxious, responsible duties of the medical profession, appear, not merely in words, but through every practicable means: — let this honourable desire animate the breast of every teacher, and the diminution of human misery will be effected to an extent which cannot be anticipated by those who have not profoundly reflected upon the subject —.

The subject which I propose for this evening observations, is an inquiry into the early history of medicine, or the origin and progress of the art, and the causes and consequences of the different revolutions which it has undergone.

You will readily anticipate the difficulty of doing justice to this subject; for it is not easy to give a clear, orderly, and connected view of the past history of medicine. ~~It will be found that~~ Its progress from an acquaintance with a few remedies to its present advanced state, has not been made by sure and regular steps; it has neither been steady, nor, correctly speaking, gradual.

In both medicine and surgery we find so much anciently known, or supposed, which was afterwards forgotten, or lost, or accidentally obscured, and again, and even more than once, revived as new, that an attempt to disentangle the discoveries in either, and to place them in a true chronological series, would be one of the greatest difficulties: such an attempt, however, is not my present purpose, nor would it be interesting or profitable were it entered upon.

Of the origin of medicine we have no distinct account; but it is evident that it began with simple and accidental experience. Very

~~We shall, however, impose upon your~~
~~attention for a few minutes longer.~~

We cannot, however, close our subject without
a ~~slight allusion to those improvements which~~
~~which have~~ attempting

soon it ceased to be a science of observation; and its first corruption appears to have arisen from the fears and ignorance of men, uncivilised, untaught, exposed to various accidents, unable to account for any of the phenomena of the natural world around them, and dependent on a superior power, of which they knew nothing. Unacquainted, besides, with the economy of the human body, and consequently unable to trace the progress of disease, they ascribed the more fatal internal disorders to the powers of sorcery, or to the wrath of those deities whom they had been taught to fear; and resorted for their cure, to those rites and ceremonies by which they conceived they could break the charm, and pacify the offended gods. Hence arose various superstitious practices, which were handed down from one generation to another, and of which the magicians of the communities availed themselves as affording the means of extending their influence.

To the Egyptians medicine, with every other science, is said to be chiefly indebted; and we are told that Thouth, the secretary of Osiris, had divine honors paid him, as the inventor of letters and all the useful arts and sciences.

A greater part of his book, the Scientia Causalitatis, consists of medical precepts, which

the physicians or priests were bound to observe strictly. Where they followed the directions, and the patient ~~happened~~ died, they were held free from blame; but ~~if~~ they deviated in any manner from the rules he laid down, they were punishable, with death, whatever might be the issue of the case.

Another of the Egyptian deities Apis, is mentioned by some as the inventor of medicine; but greater influence is attributed by others to Serapis, whose temple was at Memphis, and who was worshipped by the Greeks, as well as Egyptians, as presiding over health. In whatever way these divinities may be supposed to have first attracted the adoration of the people, it is certain that the priests, from among whom the ancient Kings of Egypt were chosen, appropriated to themselves the functions of the medical art. The chief priests exercised what was considered as the higher branch of the profession, which consisted of magic rites and prophesyings. They were the wise men and magicians of whom Moses speaks. It was the office of the chief priest to foretell the course and event of the disease, while the pastophori, an inferior order of the priesthood, applied the remedies as directed in the sacred books.

Judging, however, from what Aristotle says "that it was contrary to their rules to venture

upon any treatment before the fourth day of the disease, we must infer that they left the cure of diseases in a great measure to nature. But respecting the real Knowledge of the Egyptians in Medicine, we have no satisfactory means of ascertaining: their later practice, however, was traditionally conveyed from the early ages. We cannot attribute any scientific Knowledge of medicine to those who confined the management of each disorder to a single family, a single disease to one practitioner, and limited by law, the use of medicine to a definite period of disease. ~~But~~ Some have argued, from this distribution of medical practice, that they must have made considerable advances in the art, but it appears to us, as they were debarred from all opportunities of acquiring anatomical Knowledge, by the horror that pursued every one who cut open a dead body; and as they laboured, besides, under many other restrictions in the cultivation of the science, this could not possibly have been the case.

That the Egyptian physicians were even very unskilful in the treatment of external injuries, is proved by what Herodotus relates, in his 3d book & chapter 129 concerning their inability to cure a common luxation of the foot, which Darius, had met with. ~~on horseback~~.

Among the Jews medicine was established on nearly the same footing as among the Egyptians. The priests forming the only learned class, constituted themselves the sole judges and physicians of the people.

Diseases were believed to proceed from the

wrath of a jealous God; and prayer was the chief means employed for their removal.

Some Historians have asserted, that Moses the law=giver, must have had considerable Knowledge of Medicine, and that he must have been also deeply skilled in the science of Chemistry, from his being able to dissolve the golden calf in the wilderness, and from his changing the bitter waters of Márah, to sweet, by means of a certain wood; but without more particular information respecting the means which he employed on these occasions, it is impossible to form any accurate estimate either of his medical or chemical proficiency.

The medical Knowledge of the Chinese and the Brachmans need not detain us. Among each it was inconsiderable; the chief merits of the former seem to have consisted in punctures with needles; and the latter in botanical Knowledge.

The early Grecian medicine was chiefly chirurgical; and though we hear of internal remedies, yet we have no positive Knowledge what they were, as the assertions of some ~~author~~ historians nearer the period of their introduction are contradicted by others.

The events, however, of the Trojan war, which called for the interposition of art, were chiefly, if not exclusively external injuries; and there is very slight reason for supposing, from the language of Homer

that internal medicines were at any time exhibited.
In conformity with the superstitious character of the age, the patients were taught to expect a cure, or at least to learn the names of obtaining it, in dreams, for which they were previously prepared, or rather stupified, by a course of imposing ceremonies.

The temples were generally situated in the neighborhood of rivers, or mineral springs, and in elevated situations, where the influence of fresh air, and beauty of ~~surrounding~~ surrounding prospects, were likely to excite cheerful ideas, and to conduce to the recovery of the patient.

Bathing was an indispensable part of the initiatory process; and this, conjoined with strict abstinence which was enforced, doubtless often effected a cure. When recovery took place, the patients were led, from gratitude, to present various offerings to the deity of the place; sometimes peices of money were thrown into the spring where they had bathed, or from which they had drunk; at other times drawings ~~and casts~~ of of the diseased parts, or tablets descriptive of the disorder or cure, together with the names of the patients, were suspended on the temples.

These temples in which these narratives were recorded, became in fact, so many medical schools, differing however from one another, and that often materially, in their doctrines and practice.

Thus the Cnidian school distinguished itself by its strict empyricism; while that of the Cos or Coan

had a more dogmatical character, laying much stress on the Knowledge of the exciting causes, and the prognosis of disease, and pursuing a more methodic and rational mode of treatment. The former produced Euryphon, the author of the Cnidian sentences, and Ctesias, a most distinguished writer in his time; in the latter was developed the genius of Hippocrates.

At first they were the only actual descendants of Asculapius who were instructed in the art; afterwards other persons were admitted as pupils, having previously undergone a particular initiation, and bound them=selves by an oath to conform to the rules of the asclepiadæ

In other parts of Greece, some philosophers of comprehensive genius had already begun to extend their researches to medicine, and succeeded in rescuing the study to a certain degree, from the dominion of the priests. Of these, no one is more ~~[illegible]~~ deserving of mention than Pythagoras, who, after visiting Egypt and India in quest of Knowledge, returned to his own country and established the school of Crotona. He diligently applied himself to the study of the animal economy; introduced a regular system of dietetics; and did not neglect the practice of medicine.

His attempts to explain every thing by the power of numbers, were, indeed, sufficiently ridiculous

; and his therapeutical maxims differed scarcely from those of the temples; but the rules of regimen which he inculcated were, generally speaking, very judicious, and implied considerable powers of observation.

Among his immediate disciples Alcmæon is celebrated as the inventor of anatomy; and though his knowledge of the internal parts may be disputed, yet the concurring testimonies of Aristotle, Diogenes, and Plutarch, abundantly prove that he made no inconsiderable figure as a comparative anatomist.

He is also the author of the first theory of sleep. When the blood, he says, "returns into the large blood vessels, sleep is induced; when it is again disturbed, waking occurs: but a complete congestion is followed by death.

Of the Rodian and Italian schools, established by the descendents or priests of Æsculapius, we have few remains; of the existence of the latter we find only some imperfect hints in Galen. The former was more distinguished, but its remaining vestiges are few.

The fame of these schools, however, was soon eclipsed by Hippocrates, who seems to have been the first to whom the appellation of Physician, in its modern acceptation is due. He was destined to effect a greater revolution in medical science than had hitherto been accomplished, and whose authority continued to be regarded

It is a singular fact which I will mention in this place that in the works of Hippocrates we have it established beyond doubt that he was the first to attempt the discovery of diseases of the Chest by means of auscultation and percussion. "You will know by this" he says "quote from Le Clerks. Latin translation that the chest contains water and not pus, if, on applying the ear for a certain time to the side, you hear a sound like that of boiling vinegar." Many other passages we might take from his writings, which refer to the same means of detecting diseases — but as it is our purpose during the present course of lectures to show to what a wonderful degree of usefulness this discovery has been carried by a hundred Genius, two and twenty centuries after Hippocrates first made it, we at this time, merely refer to it. And, besides,

with almost implicit veneration by his successors, during a period of more than two thousand years.

He first seperated medicine from philosophy, gave it the form of a distinct science, and personally observed the progress of diseases as well as the effects of remedies: on this account he has been justly styled the Father of Medicine. If we look at Hippocrates as a physician, when medicine had scarcely escaped the trammels of superstition, the refinements of philosophy, or the dictates of antiquated tradition, our admiration will rise almost to enthusiasm; for we shall perceive sound judgment, accuracy of reasoning, and acuteness of observation, superior to his aera, or the state of science at that period. But to study and admire Hippocrates at the present day is very different. Science has opened newer and more extensive views; diseases are distinguished with greater accuracy; and the remedies as they are more numerous, may be more appropriately adapted to the circumstances.

If we find a striking description in Hippocrates we admire it as a mark of superior genius; and wonder how the same event could have happened both with him and ourselves. Yet strip the fact of the disguise of system, and it will be found that patient observation would alone have taught it.

He fills, ~~Hippocrates~~, so vast a space in medical history that to notice him further, would far exceed our limits

From the time of Hippocrates to Philadelphus many circumstances concurred to favour the advancement of natural knowledge. The spirit of inquiry which the early philosophers had excited, was cherished by the establishment of many rival schools; but above all, by the number of learned men, who arose to adorn and instruct the world. Within this time appeared Aristotle, Theophrastus, Zeno, and Epicurus, all of them endowed with transcendent genius and conspicuous for their zeal in the cause of science. While Aristotle applied himself with most signal success, to all the branches of moral and physical research, his pupil Theophrastus laid the foundation of true botanical science. Zeno and Epicurus developed those beautiful systems of ethics, which transported their contemporaries, and which still, in some measure divide the minds of men. However remote from medicine the speculations of moralists may at first sight appear, a little observation will teach us, that the physicians of almost every age have allowed themselves to be carried along by the current of prevailing opinions.

But the natural bent of mind and the peculiar pursuits of Aristotle adapted him much better to improve the science of medicine than any of those we have just mentioned. He was particularly well situated for the acquisition of new information on all subjects connected with natural history.

and he delegently availed himself of these advantages.
He was the first writer who published any regular treatise on comparative anatomy & Physiology, and his works on these subjects may be still read with much ~~advantage~~ interest, after all the additions which have been made by the labours of the Moderns.

The next prominent objects in the history of Medicine, which offer themselves to our attention are Herophilus and Erasistratus, the great founders of the Alexandrian School.
Er-a-sis-tra-tus

We have not much accurate information respecting the personal history of these two individuals except what has been given by Plinius and Cælius Aurelianus. They are mentioned as being the first who dissected the human ~~body~~ subject, for which purpose the bodies of criminals were allotted ~~to~~ them by the goverment; and it appears they amply profited by the advantages, so as very ~~considd~~ considerable to advance our knowledge of the structure of the body. Erasistratus approached very near the secret of the circulation, but he could not understand the use of the double heart. It may be perceived, notwithstanding he had advantages superior to any of his predecessors, that he was far remote from ~~anything~~ a correct physiology; for his system rested on an erroneous idea, that

the arteries contained only a spirit, and that the diseases, particularly fevers and inflammations arose from their admitting red blood. He was therefore apprehensive of bleeding, lest the blood should find the way from the arteries into the veins; and against the use of active remedies, trusting more to ~~nature~~ the operations of diet; hence we cannot regard him as having improved the practice of medicine only indirectly, by the additions, which were few, he made to our knowledge of anatomy. But it appears from the writings of Galen that Herophilus was more correct and more skillful in the practical department. He was one of the first who directed physicians to pay a minute attention to the pulse, and his opinions in his day, and for a very considerable time afterwards were held in the highest respect.

It was at this epoch, and probably in the life time of Herophilus and Erasistratus, that the memorable division of the medical art into three branches occurred.

But however much this seperation onto the three departments of dietetics, pharmacy, and surgery was calculated to accelerate the progress of the science, in all its different parts, it does not appear that their immediate successors turned the circumstance to great account; though Celsus affirms, that surgery improved rapidly after its seperation.

That this seperation did eventually improve the respective branches of the profession, we are satisfied,

nor, ~~indeed~~, could it be expected, indeed, of the conquering roman legions so notoriously profuse of human blood and life, to entertain any very high consideration for the professors of the art of prolonging life.

Farther, their only ~~physicians~~, being adventurers from Greece and Asia Minor, and foreigners being held as enemies, however pleasing their strange manners and language may have been to the vulgar, for this class every where, is most acceptable to that which is novel or unintelligible, their consummate affrontery and pretensions, were but indifferent pasports to the respect or affection of the proud spirited conquerors of the world:

As soon however as the premonitory symptoms of the decline of the Roman Empire had become unequivocal, there was a lamentable deficiency of genius in every department of literature, the utmost effort of ambition was to imitate the standards of excellence which adorned the Augustan age. In her most splendid period, Rome was never remarkable for the cultivation of, or attachment to our science. Arms and Eloquence engrossed the attention of her nobles; & the patricians could not degrade themselves by stooping to any occupation that demanded pecuniary compensation; medecine therefore was left to the care and culture of the lowest order of citizens, or the Helots and slaves. ~~Besides~~ ——

although at the same time we must own that many of the distinctions which were introduced were unnecessary, but are now rapidly yielding to the superior intelligence of modern times.

For some centuries after this period the Alexandrian school produced a succession of learned men, not only in medicine but in the other sciences, and contributed to the advancement of knowledge, or at least prevented the decay into which it was in danger of falling after the decline of the Grecian literature. It was during this period that the foundation was laid of the future grandeur of the Roman empire; but from their attention being chiefly directed to warlike affairs, sciences of all kinds, and especially medicine, was, for a long time totally neglected. We are informed by Pliny that Rome for nearly 600 years was without medical aid; their only resources during this time, were blind empiricism, superstitious charms, or religious ceremonies. It appears, indeed, singular, that such should have been the fact, while Rome was so little distant from Naples, a greek city, who traced their original to the Rhodians, among whom Asculapius was worshipped. The testimony of Pliny, however, is positive; nor is it repelled by Dionysius who succeeded him.

It was not until one hundred years before

the Christian æra, that Asclepiades of Bythinia, who had studied at Alexandria and Athens came to Rome as a teacher of rhetoric; but not being successful in his profession, he turned his attention to the study of medicine; and by his consummate address soon brought himself into great notice.

A prototype of many practitioners of the present day, Asclepiades affected to contemn every thing that had been done before him; and insisted that he had discovered a more compendious and effective mode of treating diseases than had ever been before known to the world. As he was ignorant of anatomy and pathology, he decried the labours of those who sought to investigate the human body, or to watch the phenomena of disease, and it is said he ridiculed Hippocrates for his patient observation of nature. His fame, however, would have been incomplete, if he had not introduced a system of his own. He attempted to explain all the functions of the human body, and all the operations of health and disease, by means of corpuscles or pores. It appears he had the ~~good sense~~ discretion to refrain from the use of very active and powerful remedies, and to trust principally to the efficacy of diet, exercise and bathing.

It is said, that a part of the great popularity he enjoyed depended upon his presenting the liberal use of wine to his patients, and upon his attending

Indeed need I remind you that such is necessary in the present day, for, however, talented, judicious, and skillful a physician may be, he must in every case, give great attention to the prejudices, and indulge their inclinations, or there is but meagre success for him. He will have the mortification to find himself supplanted, by the followers of this system, who are far inferior to him in professional abilities

in all cases, with great attention, not only to every thing which contributed to their comfort, but that he flattered their prejudices and indulged their inclinations.

According to the account given of Asclepiades by Celsus, we are indebted to him for the first arrangement of diseases into acute and chronic; a division which has a real foundation in nature, and which still forms an important feature in the latest & most improved systems of nosology. And Pliny in his 27 Book 8th Chapter tell us that Asclepiades was the inventor of the Shower bath — balinea pensiles.

Themison a ~~pupil of~~ Asclepiades adopting the leading doctrines of his teacher, founded upon them the Methodic system. He discarded the study of remote causes of disease, ~~symptoms~~ as wholly useless, and maintained that all that was necessary for the physician was an acquaintance with certain general constituents of disease. The adherents to this system contended that there were two general morbid conditions of the ~~system~~ body to which all diseases were referrible; viz a state of relaxation and a state of constriction; but they applied the terms not as it would appear, in the modern acceptation, to particular organs, but to the body at large.

Conformably to this view of disease all that the physician had to do, was to find out, in each case, the morbid condition, whether that of constriction ~~and~~ or relaxation, and to apply his remedies accordingly.

But experience soon convinced them that these

two states would not comprehend all diseases; they were, therefore, obliged to invent a third common condition which they called the mixed state.

Notwithstanding the palpable incorrectness of this system, we must acknowledge, that it had in one point of view, a beneficial tendency, by obliging physicians to study more attentively, than they had hitherto been accustomed, the different indications of disease. If the Methodic sect had applied themselves to the investigation of such morbid conditions of the system as were manifested by the symptoms; if they had not rashly attempted to simplify pathology, by ranging diseases in two general classes, according to characters that were but partially applicable: their school would have conduced still more to the improvement of medical science.

It, however, acquired a very high reputation from the labours of Soranus and Cælius Aurelianus; the former a native of Ephesus, who had studied at Alexandria, and came to Rome during the reign of Trajan; the latter an African by birth. Free from the prejudices which had disgraced his predecessors, Soranus cultivated the study of Anatomy, and wrote a book on the subject, which is still extant, and which displays considerable acquaintance with the subject. Many of his observations on disease shew, that he was possessed of great sagacity and

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strength of judgment. To Cælius Aurelianus, on the other hand, we are indebted for his doctrines and practice, and for one of the best works on medicine, which has come to us from ancient times; written, it is true, in a barbarous style, but highly deserving of perusal on account of the ~~ac~~ accurate description of diseases, and the different methods of treatment which it contains. ~~Those~~ You who are interested in this History will find a copy of this curious rare and curious work in the Baltimore Library of this City.

During this period, another system, appeared, which, on account of the popularity it is now enjoying in some parts of our country, deserves a particular notice. We allude to the bath system of Obasius, or as it is at present called the Steaming ~~syst~~ practice of Thompson. The founder of this system Obasius along with his disciple Thessalaus made himself conspicuous by the shameless audacity with which he sought to disparage the labours of others — arrogating to ~~themselves~~ himself the title of Medicorum victor, or conqueror of physicians, and that, it would appear without the slightest pretensions to either learning or talents. If you refer to Plinius in his 29 Book, the 1st Chapter, there he says that Thessalaus held forth, that he could qualify any one for a physician in the space of six months, and actually succeeded in obtaining a great number of pupils, ~~that of men~~ and men of no the least preparatory education who were ~~rope makers~~, weavers, cooks, ~~butchers~~

fullers, ~~and such like~~. These he took with him to visit his patients for the stipulated time, and then he conferred upon them the privelege of practising for themselves.

His pathology was that of the united speculations of Asclepiades with those of Themison; he admitted the constriction and relaxation of the one, with the corpuscles and pores of the other. His practice, therefore, was founded upon these principles; and its relation will sufficently shew the resemblance, if not identity, with the one claimed as being original and patented by an individual of the present age. Their materia medica is different only in the choice of remedies adaptation; but the indications and effects of the articles are the same.

The directions of Obasens, in the treatment of all diseases, are, to commence by the exhibition of an emetic; and for this purpose he and his followers, used the white hellebore. Then, he says, "you must put the atoms in action and open the pores of the skin by the application of blocks of wood boiled in water, and to prevent, he further adds," the bad effects of too much heat, or too high a temperature, you must immediately after sweating, rub the patient over with cold water, and afterwards have the same water poured on him. And after this operation, to keep the corpuscles in a state of constant action you should liberally supply your patient with ~~wine~~ wine and good food.

I should not have dwelt so long upon

a practice totally untenable in its positions, were it not to shew that in medicine, systems authently known, and deservedly fallen into disuse, have been brought up as new, to again flourish awhile, and sink into that obscurity from which they were ~~originally~~ taken.

Before, however, leaving this period of medical history, it will be necessary, to notice the ~~character~~ performances ~~and~~ of another individual, differing widely in every respect from the one we have just considered.

At this period, Galen appeared, a man of signal talents, who soon outstripped all his competitors in the profession, and divided with Hippocrates for a period of 1500 years, the admiration of the medical world.

Endowed with a genius sufficiently comprehensive to embrace all the sciences, and to cultivate them with equal success, he, even in early infancy gave proof of uncommon capacity; and while pursuing his youthful studies began to perceive the futility of the prevailing systems. Dissatisfied with what the age in which he lived taught him as incontrovertible truths, and as immutable principles of the art, he applied himself to Hippocrates works, and was struck as it were, with a new light.

He undertook the task of commenting upon the writings of the Father of Medicine; he presented his opinions in various lights, in which they had not hitherto been regarded; he repeated his observations, he extended them, and supported them with all the aids which

~~During this long intellectual torpor little was done for mankind, no new light was afforded, nor no new systems formed: till after the peace which succeeded the conquests of Mahomet.~~

philosophy and physics were capable of affording them, either by the simple comparison of facts, or by the collation of different theories, or finally, by the combination of different methods of reasoning. In short, Galen revived the Hippocratic system of medicine, and communicated to it a lustre, which it did not possess in its primitive simplicity. But, at the same time, what it gained in his hands, must be allowed to have more the appearance of dress and ornament, than of real solid acquisition.

The observations which had been collected, and the rules which had been laid down by Hippocrates, in assuming a more splendid and systematic form, lost much of their original purity; nature, whom the Coan physician had always followed with so much accuracy and caution, became obscured, and, as it were, stifled, by the foreign pomp of various sciences and dogmas; and the art of medicine, overcharged, as it already was, with subtle and superfluous rules, became entangled in a number of new and accessory difficulties: and lost that influence which it had exercised ~~for~~ over the profession for a very lengthened period. In consequence, for nearly thirteen centuries very little was done for medicine; not a new light was thrown out; nor during this whole time, was there a new system formed.

It was not until after the peace which succeeded the conquests of Mahomet, that attention became, again, directed to medicine. It was

about this period that several works of the great physicians were translated into Arabic, under the patronage of the Caliphs. From this moment the art of medicine rapidly advanced in all its branches; the arabian physicians began to cultivate clinical practice with most assiduous attention.

Almanser and Alhakem, two arabian physicians one in Bagdad, and the other in Cordova in Spain vied with each other in the establishment of their hospitals. That of caliph Almansur at Bagdad soon became a great resort for men of letters from all parts of the world, and, we are assured by Leo Africanus, that at one time it contained six thousand pupils.

But it was in Spain that the Arabian learning rose to the highest pitch, and produced the most brilliant fruits. The University of Cordova, which had been founded by Alhakem, became the most celebrated in the world, and maintained its repute for a long series of years.

Notwithstanding these numerous opportunities for learning which the arabians possessed, the science of medicine received but little acquisition from their labours. They servilely followed the authority of Aristotle and Galen; they consumed their time in commenting upon these writers, and neglecting that which would have informed them, the path of individual observation and experience.

To anatomy they contributed nothing

; the tenets of their religion forbad all attempts at dissection. Their pathology, though disfigured by numberless extravagancies, was enriched by the description of some new diseases, particularly small pox, which according to the arabian writers, first broke out in 558, and of which the first account we have is from Aetius, in his work intitled the Pandects, edited in Latin by Thesaurus: and from the Latin into English by Sprengel.

Before we close this part of our history, it will be necessary to observe, that the very general attention which was shortly afterwards paid to classical literature in the Universities of Europe, contributed in a very eminent degree to the restoration of the Hippocratic system of Medicine

Among the Italians, Leoncenus and Manardus laboured to expose the errors of the Arabians; among the germans, Fusch, Kooche, Unter and Hagenbut, made known to their countrymen the merits of the Greek physicians, by their translations and commentaries; and a similar service was done in Britain by Linacre and Caius. The Parisian school was still more zealous in the cause: Houlier, Duret, and Gorraeus, elucidated the doctrines of Hippocrates with much success; and Foësius, ~~a Frenchman~~, produced an edition of his works which even in his day, ranked as the most accurate and the most complete. Medical literature was still farther ~~improved~~ enriched by the magnificent

collections of pathalogical observations, which the industry of Dodonous, Schenkius, Forestus, and Platerus accomplished. But unfortunately the credulous and superstitious character of this age, was still opposed to any immediate improvement in the art of observing and curing disease; the major part of the physicians were more anxious to collect what was wonderful that what was useful; their practice was directed chiefly by the theory of the elementary qualities, and was disfigured by many remnants of the barbarous ages. Though the fallacy and absurdity of astrological science had been successful exposed, both by Marianus and Florentinus, and continually ridiculed by the anatomists we have enumerated, yet it was pursued with unabated ardour, and by men of otherwise great judgment and learning. Even those who evinced the greatest contempt for this nugatory art, could not divest themselves of a partiality for studies equally frivolous. The belief in the influence of demons, the efficacy of magic, and the powers of witchcraft, became very general throughout all Europe, particularly in England, which acquired the repute of being the country of witches. It is said by Sprengel that the illustrious Luther was so completely biased by the prejudices of his age, that he ascribed the majority of diseases to the arts of the devil, and found great fault with physicians, when they attempted to account for them by natural causes. Alchemy had hitherto been cultivated

only by the most illiterate men; but the introduction of the caballistic art brought the study into extensive notice, and it was thenceforth prosecuted with much eagerness by the wondering scholastics, under the patronage of Kings and princes, who fondly hoped to augment their revenues by the products of the art. Though a law was passed by Henry IV condemning as impostors the alchemists, who were then very numerous in England, yet they contrived to maintain their ground; and practised so adroitly on the weakness of his successor, Henry VI, that this monarch, finding his treasures exhausted by the unfortunate wars in which he had engaged, granted to certain transmuters of metals the privilege of making gold, and preparing the elixir of life. The labours of Basil Valentine and Isaac Holland, two chemical physicians, were rather more usefully directed; but we have only time to notice that it was reserved for Paracelsus to appropriate to himself all the knowledge which his predecessors had attained in this branch of learning, and to apply it with success to medicine. His professed object was to undermine the authority of the Galenists; and in a course of lectures he delivered, he commenced by burning the works of Galen and Avicenna, assuring his hearers, that his shoe latchets possessed more knowledge than Galen and Avicenna; that all the academies in the world had not so much experience as his beard; and that the hair of the back of his

We have now brought down our history of medicine to the sixteenth century, when the light of improvement was bursting forth from various quarters; when the splendid anatomical discoveries of Achillini, Berenger, Servetto, Sylvius, Amasus, Eustachius,

neck was more learned than the whole tribe of authors."
He boasted that he had discovered the elixir of life, the universal remedy in which mankind had been so long in search. It is somewhat difficult to determine in what degree Paracelsus was actually the dupe of his own folly; but whatever may have been his real opinions as to the efficacy of his elixir, his own death, at the early age of forty eight, in the Hospital of St Stephen, in Germany, served to humble the confidence of his followers, and to reduce his reputation to its real standard.

~~From the various causes which we have mentioned, a spirit of general improvement now began to manifest itself: the publications of monographs of particular diseases and of individual cases, with the reports of hospitals and other public institutions, though not altogether new, now gave a new impulse to medicine, which very materially contributed to advance the science, especially the practical part of it; and which may undoubtedly be considered as the most important means by which medical knowledge has advanced so rapidly in modern times.~~

~~In~~

We have now brought down our history of Medicine to the close of the fifteenth and beginning of the sixteenth centuries, periods when the light of improvement was bursting forth from various quarters; when the splendid anatomical discoveries of Achillini, Berenga,

, Servetus, Sylvius, Amasus, Eustachius, Cannani ~~but~~ above all, of Falloppius and Vesalius, threw laid a foundation for progressive advancement, and established the science on an unalterable basis.

But the limits to which we are confined will not allow us to enter into a detail of the individual merits of these authors, or into any analysis of their discoveries or opinions. At this period The publication of monographs, ~~[illegible]~~, of particular diseases and of individual cases, with the reports of hospitals and other public institutions ~~though not~~ new to all, except the illustrious Hippocrates, ~~also~~ also gave a new impulse to medicine, which very materially contributed to advance the science, especially the practical part of it; and which may be considered as the most important step by which medical knowledge has advanced so rapidly in modern times.

Medicine could not but be placed upon an immoveable foundation; for the ~~investigations~~ investigations of the Anatomist extended to every part and structure of the body; the forms and texture of the bones, the muscles, the nerves, the vessels, and the various viscera were each in their turn made the subject of particular and minute examination. These labours were amply rewarded by the discovery of the circulation of the blood by the immortal Harvey, and of the absorbent system by Asselli, Rudbeck and Bartholine; while the structure and office

of the lungs, and the relation which it bears to the heart, were explained by Malpighi, Hooke, Mayow and ~~others even to the present day~~. their associates.

With respect to the chemists at this period, although they composed a numerous and active body, yet there is none of them whose name is sufficiently distinguished above his fellows to require being particularized in this place. As science and knowledge gradually advanced, the absurdity of their speculations was more generally perceived, and their pursuits were either abandoned, or were directed by a more philosophical spirit; and although the search after the universal medicine was not entirely ~~abandoned~~ discarded, they began to occupy themselves with inquiring into the chemical constitution of the body, and investigating the changes that were induced in it by disease.

This investigation was attended with little success; their experiments were crude and imperfect, and their modes of analysis were altogether insufficient. Their practical errors were ably exposed by Sydenham, who, having applied himself late in life to the study of his profession, was never so strongly imbued with the prejudices of the schools, but that he could easily shake them off when they would not bend to his experience; and who, living on terms of intimacy with Boyle and Locke

, brought into medicine many of those sound and enlightened views, which had guided their researches in other departments of learning.

Adopting the suggestions of Bacon, Sydenham returned to the Hippocratic method of collecting histories of diseases, and shewed the necessity of coming to its observations with an unbiassed mind; ; of attending more carefully to its distinguishing characters; and of marking all the circumstances by which it was liable to be modified. He carefully observed the operations of remedies on the symptoms, and the action of the various external circumstances to which the patient is exposed, and from their effect he deduced his indications. He accommodated his theory to the facts, not, as is too frequently the case at the present day, the facts to the theory.

~~The descriptions which he furnished of the various epidemics of his time have served as models to succeeding writers, and in point of simplicity and accuracy have scarcely ever been surpassed.~~

~~But the state of medical science in this period was scarcely ripe~~

~~Notwithstanding the superiority of the practical doctrines of Sydenham,~~ Sydenham He is also to be regarded as the reviver of the Antiphlogistic method for he is the first who pointed out all the dangers of the stimulating treatment which the chemists pursued

in the early stages of acute disorders, and which, in many instances, but especially in measles and small pox, had been attended with the most fatal consequences.

Although the practical doctrines of Sydenham were manifestly superior to any since the days of Hippocrates, they were not followed ~~by the~~ but by a few of his contemporaries: at the commencement of the 17th century a large proportion of the English physicians continued to advocate the chemical hypothesis or some of its modifications

In proportion as true chemical science advanced, the partiality for chemical explications of the functions of the living system abated; and physicians seemed to have discovered for the first time, that the theory of the humours, even with all the improvements which it derived from the corpuscular philosophy, threw no light whatever on the actions of the solids. A new hypothesis, therefore, was projected, perhaps more captivating than any which had yet appeared; ~~from its scientific aspect and its high pretensions~~ and, as men, in avoiding one error, are apt to run into an opposite extreme, physiologists now attempted to explain all the phenomena of life according to the mechanical powers of the organs, and to reduce the laws of the animal economy to the rigid calculations of geometry. The body to use

Martelli

the words of ~~Borelli~~ was regarded by the i-a-tro = mathematicae sect, as a machine, composed of a certain system of tubes, and calculations were formed of their diameter, of the friction of the fluids in passing along them, of the size of the particles and pores, the amount of retardation arising from friction and ~~the~~ other mechanical causes, while the doctrines of derivation, revulsion, lentor, obstruction, and resolution, with others of an analagous kind, ~~all formed~~ were the almost universal language of both physicians and physiologists towards the close of the 17 century.

The promotion of experimental philosophy were devoted in the different countries of Europe. It was in Italy that mathematics had been most assiduously cultivated; and it was there that the first attempt was made to introduce them in medicine. In the middle of the 17 century Sanctorius published his "Medicina Statica" in which he endeavoured to shew the great influence which the insensible perspiration has on health, and to calculate with precision all the variations in its quantity, in the different conditions of the body. According to his theory, diseases originated from the noxious particles of the food being retained in the system, in consequence of the stoppage of the transpiration; and till the latter function was restored to the proper standard, no cure could well take place. He distinguished the

Among the causes which conduced to the establishment of ~~the~~ mathematical sect, the discovery of the circulation of the blood is the most prominent. When physicians found that the blood circulated in a regular manner through certain vessels, from the heart, and returned to that organ, by other vessels, from the extremities, they set about calculating the mechanical force which they supposed necessary for enabling the heart and arteries to produce the effect; and elated with their apparent success, were led by degrees to transfer their calculations to the other functions of the body. Geometry had become the prevailing study of the learned; and societies for the promotion of experimental philosophy were established in the different countries of Europe. It was in Italy that mathematics had been most assiduously cultivated; and it was there that the first attempt was made to introduce them in medicine. In the middle of the 17 century Sanctorius published his "Medecina Statica" in which he endeavoured to shew the great influence which the insensible perspiration has on health, and to calculate with precision all the variations in its quantity, in the different conditions of the body. According to his theory, diseases originated from the noxious particles of the food being retained in the system, in consequence of the stoppage of the transpiration; and till the latter function was restored to the proper standard, no cure could well take place. He distinguished the

different alimentary matters according to their specific gravities, and according as they appeared more or less fitted to pass off in the way of insensible perspiration; he even ventured to apply his maxims to the passions of the mind: showing how love, joy and equanimity favoured the excretions, while disappointment, sorrow and fear impeded them: how fevers and melancholy arose from the obstructed perspirable matter, where grief was long continued: and how they were to be removed by restoring the suspended exhalation.

Among the "Aphorisms" of Sanctorius, there are many sound observations; and medical science is under considerable obligations to him for having directed the attention of physiologists to the functions of the skin; which, till then, had been in a great measure overlooked: but his views, like those of most theorists, were too partial; and we have little doubt, that, in one respect, they had a most injurious influence, by encouraging the physician in the universal employment of ~~sudorifics~~ sweating medicines.

Such were the advances towards the formation of that system on which the talents of Borelli, Bellini, Baglivi and Bernouilli, in Italy, and of Pitcairne, Keil, Mortringham and Mead in England shed so much lustre. That the labours of these individuals and their successors were often confirmed by observation, and have served to illustrate

those movements of the living body which are clearly referrible to mechanical laws, such as the compound action of the muscles, the functions of the eyes &c. will not be denied: but when mathematical reasonings were applied to living phenomena, which furnished no fixed data for calculation, and which were, in fact, to be investigated by very different methods, no useful result could be expected.

If medicine, gentlemen, ever received any benefit from the mathematical hypothesis, it was by accustoming the mind to the strictness of mathematical methods: by fixing attention of physiologists and pathologists to points of the animal economy that had been previously but little investigated: and by inducing them to seek occasionally for experimental proofs of their theories: and thus led to discoveries which probably would otherwise have long remained unmade.

As we approach nearer our own times, we shall proceed more hastily on: and of the remaining systems of medicine, we shall connect only the historical links. The erring and extravagant spirit which we have so frequently found wandering beyond the sphere of sober investigation and patient observation, seems again to appear in the 18th century

From the chemists and mathematicians

It would be, however, a very unprofitable labour to look through the voluminous writings of Hoffman, & Stahl and cull out all the peculiarities of their pathological speculations; seeing, as we shall in our succeeding lectures, they have been so ably condensed explained and improved by Cullen. Before we leave the age of Stahl & Hoffman permit us to pay our passing compliments of respect to their cotemporary Boerhaave, who, if not their equal in point of brilliancy and reach of genius, surpassed them in solid understanding and correct judgment. His aim was much lower; instead of attempting to dazzle the world with the glare of new theories, he was satisfied with gleaning the better parts from all the systems and reducing them to a harmonious reconciliation, which should give the ~~st~~ science the advantage of profiting by the discoveries and reasons of all.

~~About, or a~~

About, or a little after this period Haller.

Boerhaave took his system. And while he held the reins of medical empire, two rivals arose who overturned his apparently well established dominions. These were Hoffman and Stahl, who were rival professors at Halle. The former was a voluminous writer, but not the founder of a sect; for he does not always reason with consistency, nor are his arguments directed to any definite system. Stahl, with scarcely less industry, but with acuteness and talents eminently superior, aimed at changing the whole of the science. He acknowledged with Van Helmont, a ruling power, guarding the constitution against disease, and repairing every defect which might occur; but, with this superintendence, he considered the human system as a living and an irritable machine, susceptible of various and irregular actions, and consequently of topical congestions. This is the meaning of "spasm", of "tonic motion", and similar expressions; nor can we avoid the suspicion, that, when Hoffman speaks of spasm, he means what Stahl styles his tonic motion. Stahl very properly asserts that that the operations of chemistry and mechanics are unable to account for the vital functions, and has adduced arguments in support of his position, that seem incontrovertible; but, then, the hypothesis which he offers is equally gratuitous, and liable to many and serious objections. Still he is entitled to our remembrance, in as much as his speculations

Whatever becomes of this idea, it is evident that the germ of this new doctrine gradually expanded. Even Boerhaave, we are told, in his later years, did not reject the consideration of a nervous fluid, though consistently with his humoral pathology he considered it "inactive"; and Gaubius his successor treats at some length of the disease of the vital solid. Haller, who is justly styled the father of modern physiology, though belonging chiefly to the mechanical sect, is entitled to our highest respect for his industry, assisted this new revolution by his experiments on irritability; and Dr Cullen at last constructed, on this ground, a system highly beautiful and ingenious, though like many we have reviewed, is too refined and in many respects incorrect. On the same foundation Dr Brown built his theory of excitability; but while the Cullenians made the human body wholly material, Brown considered it as entirely spiritual, created only by heat, motion and other stimuli

~~The peculiarities of this doctrine are, that all the actions of life are referrible to the excitement of the body by stimuli, and all diseases to that of direct and indirect debility, a debility arising from a deficiency, or a preternatural excess of excitement.~~ That the

In fact, gentlemen,

The fundamental error in the doctrine of Brown is, that he mistook a single property of animal matter for the primary cause of life and disease; neglecting the consideration of those various powers which the different organs possess, according to their peculiarities of structure, and overlooking entirely those laws by which they influence each other, and communicate or modify the affections to which they are severally liable.

But notwithstanding the many and palpable inconsistencies of this system, which we have not time to point out, it will always occupy a distinguished place in the history of medical science, as exhibiting a remarkable example of the force of original and unaided genius in erecting a system plausible and captivating in its aspect, but devoid of the essential support of facts and observations, and therefore fated to share the lot of all systems built upon so unstable a basis.

~~Such was the state of medical science when our illustrious countryman Benj. Rush, illustrious countryman Benj. Rush, ascended the professorial chair.~~

at the close of the 18th century;

Such was the state of medical science when our illustrious countryman Rush, ascended the professorial chair.

He possessed an acute an ardent mind; he was well skilled in the medical literature both of the antients and moderns, but he had no undue respect for the opinions of others on the mere ground of authority.

His peculiar excellence as a lecturer afforded him an ample opportunity of promulgating and enforcing his doctrines, while their real merit, no less than the mode in which they were announced, rendered him in the highest degree popular among his pupils and cotemporaries.

He detected the defects of former hypotheses with a shrewdness or sagacity

He cannot be doubted but

Previous to Darwin, no one seems to have conceived the idea of applying the doctrine of association to the theory and treatment of disease; although the tenets of Hartley were embraced by a large proportion of his countrymen, and his illustrations of the associative actions of the nervous ~~syst~~ and muscular systems were universally received.

Darwin possessed a knowledge of medicine and all the collateral sciences in their full extent; he was familiar with practice as a perusal of his great work the Zoonomia will satisfy you; he had ~~[illegible]~~ a taste for minute detail and experimental research which, while it appeared to qualify him for a medical theorist, enabled him to give his system an imposing aspect of induction and generalization. His speculations, although highly refined, profess to be founded upon facts; and his arrangement and classification, although ~~[illegible]~~ complicated, appears consistent in all its parts.

No theory which had ever been offered to the profession was more highly elaborated, and appeared to be more firmly supported by ~~Ex~~perience and observation, while every adventitious aid was given it from the cultivated taste and extensive information of the author. Yet it made little impression

on the medical public; its leading principles rested rather upon metaphysical than upon physical considerations; its fundamental positions were found to be gratuitous, and many of the illustrations, although ingenious, were conceived to be inapplicable and inconclusive.

Such was the state of medical science near the close of the 18th Century. At this period a new era began to illumine the domains of general science and literature, in which medicine largely participated. There was no one circumstance so pre-eminent as to give date to this new age, which has in contradistinction to the preceding "age of learning", as the present is, "that of experiment"; but a number of events transpired in the political and intellectual world, which emancipated it from the shackles that had hitherto fettered it to the car of authority. Formerly the whole medical world ranged themselves under the banners of two or three great chieftains; every one conceived it essential to attach himself to some school, or enrol himself under some distinguished leader; but a new feeling now arose, a great variety of speculations and doctrines were perpetually brought before the public, some of which from their intrinsic merit, acquired a degree of popularity, whilst the greater number of them quickly resigned their place to others, that seemed to be based on more correct principles, or were more attractive from their novelty. The necessary consequence of this state was to detach the mind from the influence of theories & systems,

to diminish the authority of great names, to inspirit individuals to a greater dependence on their own powers, and to cast aside their servile devotion to the tenets of others. Now, men, really began to disregard scholastic disputation, to give comparatively little attention to abstract theory, universally to recognise the value of the inductive method of philosophizing, and professedly to build their hypotheses solely upon the generalization of facts.

Tis true, this plan has not in all instances been strictly adhered to; our observations have not been always correct; nor our experiments well conducted; nor our investigations at all times conducted with due caution; but the free spirit of enquiry has arisen and generally prevailed and the exertions formerly devoted to the accumulation of mere learning, have been bestowed on the more important business of acquiring real and useful knowledge.

~~And~~ About this time, a new star appeared in the medical planetarium, and by its brilliant and diffusive irradiations, gave a new impulse to medicine. This was in the ascension of our illustrious countryman Doct Benjamin Rush to the professorial chair.

To the native energies of a powerful mind, the subject of our notice added habits of industry and application: his peculiar excellence as a lecturer afforded him ample opportunity of promulgating and enforcing his doctrines, while their real merit, no less than the mode in which they were announced, rendered him in the highest degree popular among his pupils and colemporaries.

He detected the defects of former hypotheses with shrewdness and sagacity; while he proposed his own views with a degree of candour which tended to render them the more acceptable, and disposed his audience to receive them in the same spirit with which they were proposed. But his great and appropriate merit, and which entitles him to the admiration and gratitude of posterity, is the sagacity and diligence which he manifested in the examination and discrimination of the phenomena of disease.

The doctrines of Cullen and Brown who were, at his time, governing the medical world, underwent in his hands, a revision, correction and improvement, such as to convert them into an entirely new system.

Altho there is a striking similarity in some of the features of Rush's doctrines with those of Brown, he is entitled to the merit of originality even in regard to them, because they were suggested about the same time. But in other respects his claims are indisputable. His system wrought the greatest, the most important change on the practice of Medicine which has been accomplished since the days of Hippocrates. His writings contain a rich store of pathological observations, and important and useful practical hints.

You will find them no less elegant and agreeable than useful and instructive; abounding in information no less curious for its extent and variety, than for its great importance and practical bearing; deserving the attention of every student, essential to all who would be proficient in medical science, an honour to the University in which they were pronounced; and an imperishable monument to their illustrious author.

Under the influence of Dr. Rush's writings medical men began to indulge a laudable scepticism; they investigated the opinions most sacred from antiquity and most throughly established by the authority of names; they now emancipated themselves from a servile thraldom, and began to rely on their own perceptions, judgment and reason. The practice which has since sprung up, is more prompt, energetic and successful. The long list of what were clafsed incurable diseases is already, much reduced, epidemics, are less fatal, and the duration of disease generally much less protracted. The effects of his labours are not confined to his own country. They have extended to every part of the globe where medical science is cherished. They have extended themselves beyond the name of their author; thousands are now practising on the principles of Rush, who scarcely know that such a man ever lived. Europeans are too proud to acknowledge their obligations to the researches of a new country, and have accordingly adopted his principles without acknowledgment.

the proud critic of English literature, the boastful Edenburg Reviewer, who so contemptously asked, Who reads an American book?, we are told, by a writer in the american magazine, had just risen from writing an article on some pamphlets that had been published on the then prevailing epedemic fever of Great Britain, in which he had embodied an outline of the most correct doctrines and best practice in fevers, which is wholely taken from Rush, and his name not once mentioned or adverted to.

To point to the many instances of plagiarism, from his writings, would be a tedious employment, we can not however abstain from remarking that the most prominent and highly extolled pathology of England, that of Parry is little more than a transcript from Rush. And as we advance in our succeeding lectures, I will prove to you, that the basis of the French pathology of Bichat and Broussais is, only a literal translation from Baglivi and the American:

there may be some indulgence given to the pride of the old countries of Europe, in being unwilling to concede due credit to the scientific labours of a new, and as they affect to believe, illiterate people, but what shall we say of our own countryman, who not only adopt his principles without acknowledgment, but conceal their theft under defamation of the character of their benefactor

Unfortunately, however, it has always been the fate of greatness to be assailed by the envy and detraction of cotemporaries, and to shine forth in its native lustre only after the bosoms in which those petty vices had their abode, have sunk into cold oblivion.

Many of the greatest men who have done honour to our species, have lived unknown by their citizens, and even by their next neighbor, or if known only through the evil reports of their envious, inferior and malignant rivals.

The cotemporaries of Galen, Harvey, Sydenham, Boerhaave, and others, knew them only by the representatives of the Thersitic corps.

Of others more remote in antiquity it has never been determined where they were born, or where lived. A hundred cities claimed the honor of giving birth to Homer, but, not till his envious cotemporaries had long ceased to be known. In this sense, it may be well said, great men only begin to live after death. Thus it will be in a few more years with Rush, when personal envy and jealousy shall have ceased, his memory will be cherished, and grow ever = green; his virtue and talents will constitute a constellation, which shall be a exposure to medical enquiries,

till the rays of conjecture, shall be extinguished by the full flood light of certainty; or till the Science of this life shall be lost in the real Knowledge of the life beyond the grave.

Gentlemen:

Having now pointed out the principal revolutions which have occurred in medical science from its earliest period to the close of the 18th century; to be complete it would be necessary to enumerate and investigate the merits of the different discoveries and improvements which have taken place, in all its different branches during the present age.

But not to speak of the impossibility of such an undertaking in the confines of a single lecture; and the abilities requisite for its correct and impartial performance, it is obvious that this would be in a great measure to describe the existing condition of the art; which it was not our design.

On the whole, in the review which has passed before us of the different stages of improvement of medical science, it must be obvious that the physicians of the earliest and middle ages, entertaining the most inaccurate notions as to the functions of the body in the sound state, and as to the essential nature of diseases, were yet enabled, by empirical observation, to acquire a surprising extent of accurate information, as to the causes and natural progress of diseases and the power of remedies over their most formidable symptoms.

In more modern times physicians have acquired a general knowledge of the nature of all those functions in which the visible movements of the body are chiefly concerned, and so far contributed to the elucidation

of many diseases; while the distinctions of the different morbid ~~diseases~~ states, as far as they appear during life, have been ably arranged and classified; the application of remedies to them has been reduced to a much more regular system; and the list of really efficient remedies gradually curtailed, and their properties more accurately determined.

The great improvements and advancements which mark the present age may be chiefly attributed to the more diligent cultivation of pathological or morbid anatomy, whereby the localities, the varieties, and the effects of disease are accurately ascertained: and thus the immediate causes of the fatal termination of them ~~diseases~~ more satisfactorily explained; ~~the immediate~~ ; and at the same time, by the numerous improvements in physiology, the immediate objects to be attained by medical practice are being more clearly defined, and additional precision given to the administration of remedies.

In looking forward to the farther improvement of our science, to its increasing usefulness and efficacy, our hopes rest, ~~partly~~ on the improvement of medical education, and the more general diffusion through the members of the profession, of the knowledge which we already possess — ; and, ~~partly~~, ~~also~~, on the progress of pathological anatomy and clinical observation.

In foreign countries the attention of the profession has been ~~long~~ for several years upon this consideration properly fixed, by many accurate and close investigators, and in our own country, we have, indeed, ~~a few~~ many distinguished men amongst us who labour to support our medical reputation on a level with that of other nations, but it must be owned, however humiliating the confession, that the great mass of our medical men, through imperfect means of education, or an ill-founded fear of inability to acquire a sufficient knowledge, for under the culpable reflection that if they simply tread in the steps of their fathers they will do well enough — this class of the profession continue to practice medicine ~~in an empirical~~, but from whom we never can expect the smallest contribution to the advancement of the science were they to live a thousand ~~times~~ years. It is indeed time that such a state of things, in this country, should cease, and that farther and more extended efforts should be made to place medicine on a standard with the other sciences. We have said elsewhere; exact, we may never call the science of medicine, but we are satisfied that a searching examination into the nature and operation of those causes which have for so many ages retarded the progress of the art would enable us to show that the comparative slowness with which it has advanced, and the imperfections which are every where confessed

"You owe so much, that it is not bound to be satisfied with the gratitude of words, but is entitled to require the genuine homage of a well spent life"-

to exist, depend not so much on the impossibility or the difficulty of raising medicine to an equality with the precise sciences, as on the manner in which it has hitherto been studied, and the obstacles which have been thrown in its path by those very persons who are most interested in the perfectibility of medicine. But, Gentlemen, to detain you longer, in reflections of this kind, would be, perhaps, to exhaust your patience. I shall now hasten to a close; but I cannot do so without addressing a few words in the frankness of friendship, yet with the feelings of a preceptor, to those who have left us, and some of whom I am proud to see again honouring us on this occasion with their presence; men before whom lies the land of promise, attainable by those exertions which were begun and fostered in this place. Is it necessary for me to urge you, my valued associates, in your exertions of extensive usefulness throughout your professional career, to maintain your connection with your Alma Mater; to remember what you owe to this seat of learning? If your minds are properly impressed with the value of intellectual distinction, this advice will be unnecessary; the higher you rise in your profession, the older you grow, the more fondly will you look back, with respect and veneration, upon this University.